

CLAIMS:

1. A light active device characterized by: a light active material provided in a first region; and a polymer provided in a second region, the polymer being formed by selectively cross-linking a monomer from a mixture containing the monomer and the
5 light active material causing a concentration of the light active material at the first region and a concentration of the polymer at the second region.
2. A light active device according to claim 1; further comprising a first electrode and a second electrode having the polymer and the light active material disposed there-
10 between.
3. A method for making a light active device according to claim 2; wherein the light active material comprises organic light emitting diode material for emitting light when a voltage is applied to the first electrode and the second electrode.
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4. A method for making a light active device according to claim 2; wherein the light active material comprises inorganic light emitting diode material for emitting light when a voltage is applied to the first electrode and the second electrode.
- 20 5. A method for making a light active device according to claim 2; wherein the light active material comprises a radiation-to-energy material for generating an electrical current in response to radiation.
- 25 6. A method for making a light active device according to claim 5; wherein the radiation is in the visible spectrum.
7. A method for making a light active device according to claim 5; wherein the radiation is in the non-visible spectrum.

8. A method for making a light active device according to claim 1; wherein the light active material comprises an organic light active material including at least one conjugated polymer, said at least one conjugated polymer having a sufficiently low

5 concentration of extrinsic charge carriers so that on applying an electric energy to the light active material charge carriers of first and second types are injected into the semiconductor particulate and combine to form in the conjugated polymer charge carrier pairs which decay radiatively so that radiation is emitted from the conjugated polymer.

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9. A method for making a light emitting device, comprising the steps of: providing a bottom substrate; providing a bottom electrode over the bottom substrate; disposing an emissive layer comprising a mixture including a dispersed OLED particulate in a monomer fluid carrier over the bottom substrate; selectively polymerizing the 15 monomer causing the OLED particulate to concentrate in emissive regions and the polymerized monomer to concentrate in polymerization regions.

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A method for making a light emitting device according to claim 9; wherein the step of selectively polymerizing the monomer comprises using a laser interference pattern to form light and dark regions corresponding to the polymerization regions and the emissive regions.

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A method of making a light emitting device according to claim 9; wherein the step of selectively polymerizing the monomer comprises using a radiation source transmitted through a patterned mask to form light and dark regions corresponding to the polymerization regions and the emissive regions.

12. A method of making a light emitting device according to claim 11; wherein the patterned mask includes at least one of the bottom electrode and a top electrode provided over the emissive layer.

5 13. A method of making a light emitting device according to claim 11; wherein the emissive regions are formed into individual pixels surrounded by the polymerization regions.

10 14. A method for making a light emitting device according to claim 9; wherein the step of selectively polymerizing the monomer comprises patterning the emissive regions to form conductive pathways between the polymerization regions.

15 15. A method for making a light-emitting device according to claim 14; wherein the conductive pathways form an electrode grid of a display device.

15 16. A method of making a light emitting device according to claim 14; wherein the mixture further includes a conductive material capable of being patterned into the conductive pathways; and further comprising the step of patterning the conductive material into the conductive pathways.

20 17. A method of making a light emitting device according to claim 16; wherein the monomer is polymerized under a first polymerization condition; the conductive material includes a second monomer capable of being polymerized under a second polymerization condition; and further comprising the step of patterning the OLED particulate and the conductive material in the conductive pathways by selectively polymerizing the conductive material causing the OLED particulate to concentrate in emissive pixels and the conductive material to concentrate in non-emissive regions between the emissive pixels.

18. A method for making a light emitting device according to claim 9; further comprising the step of applying an aligning field can be applied during the polymerization step or other time when OLED particulate is mobile; aligning field
5 can be magnetic or electric, and the patterned electrodes can be used to define field.
19. A method for making a light emitting device according to claim 9; wherein the OLED particulate includes a liquid crystal constituent and a chromophore constituent.
- 10 20. A method for making a light emitting device, comprising the steps of: providing a bottom substrate; providing a bottom electrode over the bottom substrate; disposing an emissive layer comprising a mixture including an emissive/more-conductive material and a non-emissive/less-conductive material over the bottom substrate; selectively patterning the mixture causing the emissive/more-conductive material to
15 concentrate in emissive regions and the non-emissive/less-conductive material to concentrate in non-emissive regions.
- 20 21. A method for making a light emitting device according to claim 20; wherein the step of selectively patterning comprises using a laser interference pattern to form light and dark regions corresponding to the non-emissive regions and the emissive regions.
- 25 22. A method of making a light emitting device according to claim 20; wherein the step of selectively patterning comprises using a radiation source transmitted through a patterned mask to form light and dark regions corresponding to the non-emissive regions and the emissive regions.

23. A method for making a light emitting device according to claim 20; wherein the mixture further comprises a non-emissive/more-conductive material; and the step of selectively patterning includes patterning the emissive/more-conductive material and the non-emissive/more-conductive material into conductive pathways between the
5 non-emissive regions.

24. A method for making a light-emitting device according to claim 20; wherein the emissive/more-conductive material comprises an OLED particulate includes a liquid crystal constituent and a chromophore constituent.